

Work Order ID 140015

140015

Page 1

Thursday, December 17, 2015 8:13:40 AM

Item ID: D3456-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Washer

Start Date: 12/17/2015 Start Qty: 25.00

25

Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 25.00

25

Customer:

Reference:

Approvals: Process Plan: ML3

Date: **DEC 17 2015**

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3456

Rev A

100

0.00

100

PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 30766 P/N: 91525A120 per Dwg D3456Possible
Supplier: McMaster-CarrMaterial release note is required

CY DEC 17 2015 25

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.01

Packaging

Ensure Material Release Note is attached

25x SPAS-12-21

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

(25) 15-12-24

DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Page 2

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Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 25.00

25

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Identify as per dwg & Stock Location: St 038A

0.00

130

Packaging

Memo

0.00

Packaging

25

JAN 04 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.04

Quality Control

MLJ

JAN 05 2016

MLJ

JAN 04 2016

DAS
6
89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Thursday, December 17, 2015 8:13:47 AM

Page 1

Work Order ID: 140015

140015

Parent Item: D3456-1

D3456-1

Parent Item Name: Washer

Start Date: 12/17/2015

Required Date: 12/17/2015

Start Qty: 25.00

Required Qty: 25.00

Comments: IPP A05.10.03New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

91525A120

Purchased

No

100

Each

0.0000

1

25

91525A120

washer

**

25x sp/15-12-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

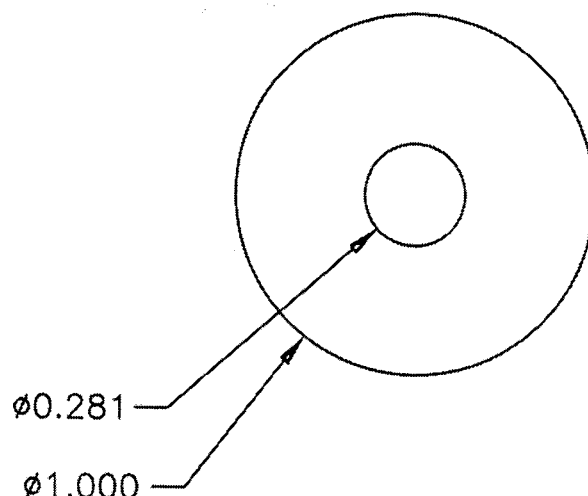
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																



DESIGN CP	DRAWN BY CP	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3456	REV. A SHEET 1 OF 1
DATE 05.09.01		TITLE WASHER	SCALE 2:1
A	05.09.01	NEW ISSUE	

RELEASED
05-09-06 [Signature]

SPECIFICATION CONTROL DRAWING



D3456-1 WASHER

- 1) MATERIAL: 316 STAINLESS STEEL, 0.050" THICK
- 2) MAY PURCHASE McMASTER-CARR P/N 91525A120
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 140015-MCS
15-12-17

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO30766

Purchase Order Date 12/17/2015

PO Print Date 12/17/2015

Page Number 1 of 8

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	91525A120 AS PER DWG D3456 REV. A B140015	washer	12/21/2015 Yes 12/21/2015		25.00 Each	\$0.27	\$6.66
Line Total:							\$6.66
2	8672K31 AS PER DWG D4287 REV. A B140014	UHMW U-Channel	12/21/2015 Yes 12/21/2015		24.00 f	\$3.26	\$78.24
Line Total:							\$78.24
4	71500-30	91375A681 SET SCREW	12/21/2015 Yes 12/21/2015		1.00 Each	\$12.53	\$12.53

Note:

12/17/2015

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO30766

Order Placed By
Chantal Lavoie

McMaster-Carr Number
4757738-02

Page 1 of 1

12/17/2015

Line	Product	Ordered	Shipped
1	91525A120 Type 316 Stainless Steel Flat Washer, Oversized, 1/4" Screw Size, 0.281" ID, 1.000" OD, Packs of 25	1 Pack	1 11 8P15-12-21
3	91375A681 Alloy Steel Cup Point Set Screw, 7/16"-20 Thread, 7/16" Long, Packs of 25	1 Pack	1
4	8324A118 Cobalt Steel Decimal Size Chucking Reamer, .5040" Diameter, 2" Flute Length, .4355" Shank	1 Each	1
5	8739A11 East Sharpening Stone, Round Shape, 4" Diameter, 100/280 Grit	1 Each	1
7	4292A27 Double Cut Carbide Bur with 1/4" Shank Diameter, Cylindrical-Flat End, 3/8" Head Diameter, 1" Cut Length	5 Each	5
10	91251A595 Black-Oxide Alloy Steel Socket Head Cap Screw, 5/16"-18 Thread, 3" Length, Packs of 10	5 Packs	5
11	29415A37 High-Speed-Steel 1/2" Diameter Reduced-Shank Drill Bit, 3/4", 6" Overall Length, 2.10" Drill Depth	2 Each	2
12	29415A23 High-Speed-Steel 1/2" Diameter Reduced-Shank Drill Bit, 35/64", 6" Overall Length, 2.10" Drill Depth	1 Each	1
13	7367K61 Wall-Mount Time and Day Activated Switch, Digital, 40 on/Off Cycles, 15 Amp at 120 VAC	4 Each	4
14	7533K82 Wall Plate, for GFCI Receptacle, Single-Device (1-Gang), Stainless Steel	2 Each	2
15	7533K84 Wall Plate, for GFCI Receptacles, Two-Device (2-Gang), Stainless Steel	2 Each	2
17	6782K11 Square D Qo Circuit Breaker, Single Pole, 120/240 VAC, 15 Amps	1 Each	1
19	7267K26 Flexible Zinc Conduit Fitting, Straight Connector, 3/8 Trade Size	20 Each	20

Expected to ship

6	2047A66 Brown & Sharpe Bestest Dial Indicator, 0-0.030", 0.0005" Graduations, 1" Dial Diameter, Black Face	1 Each	1 to ship by 12/24
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Notes about your shipment

The U.S. Department of Transportation regulates the shipping of line 13. By purchasing from McMaster-Carr Supply Company, you agree not to transport or permit others to transport purchased items except in accordance with U.S. law and any other applicable laws.